



# Space to Roam

## *Recreational Access & Fish Passage—A Win-Win*



Outdoor enthusiasts, bull trout, westslope cutthroat trout, and other fish

species have occasion to celebrate with the completion of a fish passage project on Deep Creek in Washington. By replacing problematic culverts along Deep Creek with two bridges, the Service and partners restored natural stream flow, improved recreational access to popular wilderness trails, and reestablished access to five miles of stream habitat for fish.

### Lost Access

The poor infrastructure of road culverts at two locations along Deep Creek was to blame for a nearly five-year closure of popular wilderness trails in Okanogan-Wenatchee National Forest. Because the culverts were too small to accommodate seasonal flows, water and sediment could not pass freely. Over the years, the stream bed upstream of the culverts rose. Higher stream beds and high flows coupled to result in multiple road washouts during the 1990s through early 2000s. Eventually, the access roads for the trails became so damaged that the Forest Service had to close the area.



*Bull trout, a species listed as threatened under the endangered species act, now have access to five miles of stream habitat in Deep Creek.* Photo Credit: Joel Sartore, National Geographic

*“The Deep Creek project was vital for bull trout and westslope cutthroat restoration efforts in this important watershed. Aquatic organism passage was restored for all life stages during expected times of migration. This project was also important in restoring natural bedload movement and floodplain function.”*

--Gary Torretta, District Fisheries Biologist, Naches

### Bull Trout Bastion

Recreationalists weren't the only ones who lost access as a result of the culverts—fish were also cut off from miles of prime stream habitat. Restricted access was particularly concerning for bull trout, a species listed as threatened under the Endangered Species Act, because they are more to sensitive increased water temperatures, poor water quality, and low flow

conditions than many other fish species. These sensitivities and the fact that Deep Creek is



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home to the third largest population of bull trout in the Yakima River Basin slated the Deep Creek Fish Passage Project as a high priority in the Yakima Subbasin Plan. Improving fish passage and restoring access to quality habitat in Deep Creek is expected to assist in the development of a more resilient resident population of bull trout.

## Partners Make It Happen

The US Forest Service, Washington Department of Fish and Wildlife, and the US Fish and Wildlife Service worked together to design and implement this nearly \$1.23 million project. Our agency contributed \$115,000 through National Fish Passage Program funding as well as technical input on the bridge's infrastructure and instream enhancements to improve fish rearing habitat.

## Freedom to Roam

Now that the Service and partners have replaced the undersized culverts with bridges, people and fish can enjoy more of nature. Recreationalists have safe road access to wilderness trails. Meanwhile, bull trout, westslope cutthroat trout, and other fish species can swim freely with five additional miles of quality habitat.



**Before:** Original culverts along Deep Creek could not accommodate high flows and blocked fish passage. Photo Credits: USFWS



**Now:** Replacing pipe culverts with bridges restores natural stream flow. Photo Credits: USFWS



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